



# EFFECT OF ICON MODEL-BASED WHATSAPP MEDIATED INSTRUCTION ON ACHIEVEMENT OF B.ED. STUDENTS DURING CURRICULUM TRANSACTION IN HIGHER EDUCATION

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## ABSTRACT

Higher education is the tertiary phase of learning that provides instruction to the students who are at the latter adolescents and adulthood stage preparing themselves for the real world of work. Strong higher education in any country prepares competent and skillful citizens and manpower in different streams of education. However without proper facilitation and instruction on the part of college and university teacher, the objectives and goals related to maintaining proper quality at higher education cannot be achieved especially in the college of teacher education during curriculum transaction. In order to maintain adequate quality at higher education level innovative and effective instructional strategies must be followed by the facilitators in different colleges and universities. It is notable that students of 21<sup>st</sup> century are not interested to listen traditional method based lecturers in higher education institutions and demanding for more resourceful environment which must be based on learner centric and learning centric climate. They are taking active participation in different social websites and interacting with ICT based media for the purpose of learning and preparation of their examination. Such frequent use of social websites and Apps like Facebook, Twitter, Whats App by students at higher education creates an question in the mind of researcher that: Can such websites be used as a media for designing instruction based on Interpretation Construction Model for facilitating students of Higher Education in terms of improving their achievement by satisfying their learning need and demands in 21<sup>st</sup> century? As a teacher of Higher education, an experimental research has been carried out at Nabakrushna Choudhary college of teacher education by the researcher for exploring the effectiveness of one innovative and instructional strategy i.e. ICON model based Whats App Mediated instruction on achievement B.Ed. students.

The main objective of the study was to find out the effect of ICON Model based Whats App mediated instruction on achievement of B.Ed. students. Post Test only Experimental research methodology has been carried out to conduct the study. It is found that there exist significant difference in between control group and experimental group with respect to achievement of B.Ed students. It is suggested that in higher education system Whats App can be utilized as an effective media for using ICON model of constructivism.

**KEY WORDS:** ICON Model, Whats App, B.Ed. Students, Curriculum Transaction, Higher Education.

## INTRODUCTION:

Higher education is the tertiary phase of learning that provides instruction to the students who are at the latter adolescents and adulthood stage preparing themselves for the real world of work. Strong higher education in any country prepares competent and skillful citizens and manpower in different streams of education. However without proper facilitation and instruction on the part of college and university teacher, the objectives and goals related to maintaining proper quality at higher education cannot be achieved. In order to maintain adequate quality at higher education level innovative and effective instructional strategies must be followed by the facilitators in different colleges and universities. It is notable that students of 21<sup>st</sup> century are not interested to listen traditional method based lecturers in higher education institutions and demanding for more resourceful environment which must be based on learner centric and learning centric climate. At the higher education level, teaching method and media plays very crucial role during curriculum transaction, especially in the field of secondary teacher education system through B.Ed. course. The syllabus of B.Ed aims to nurture proper level of teaching and pedagogical competency in addition to sociological, philosophical and psychological theoretical inputs. The two year B.Ed. course demands suitable learner centric media method to get transacted. Among different latest media and method, ICT based media and methods gradually becoming more popular due to its accessibility, portability, speed, cheap cost and multisensory experience provision.

The world is witnessing continues upsurge and massive improvement in Information and Communication Technology (ICT) today and this age. The impact of ICT on learning is currently in relation to use of digital media, primarily computers and internet to facilitate teaching and learning. ICTs are the technologies used in conveying, manipulation and storage of data by electronic means, they provide an array of powerful tools that may help in transforming the present isolated teacher-centred and text-bound classrooms into rich, student-focused, interactive knowledge environments. To meet these challenges, learning institutions must embrace the new technologies and appropriate ICT tools for learning

This development has brought about era of networking and digital communications regardless of geographical boundaries. The internet provides variety of digital communication tools. Billions of people use facilities like Search engines, Facebook, Instagram, Sme, Twitter Web pages, E-mails, Really Simple syndication (RSS), E-journals, E-newspapers, Internet Banking, Internet Telephony, Conferencing, Multi-Media Sharing, Online News Rooms, Social Networking etc. to express opinions, experience and insights. According to Facebook statistics (2011), as cited in Tuurosang and Faisal, (2014) Facebook alone controlled over 800 million active users sharing more than 30 billion pieces of content each month. These come in various forms notably; news, stories, blog post, notes,

photo albums and many more. Twitter which comes in the form of micro-blogging is another preferred social networking platform. It also hosted about 140 million tweets per day. And as many as 460,600 new twitter accounts were opened every year (Twitter statistics, 2011)

In addition to social media constructivism based models are considered as useful tool to enhance the quality of education. One of constructivism based model is Interpretation construction model (ICON) created by Black, John., Mc Clintock, Robbie. It has seven steps such as: observation, contextualization, cognitive apprenticeship, collaboration, multiple interpretation, multiple manifestation. This model can be implemented at higher education through Whats App media.

These social media especially whats app can be utilized for creating teaching learning environment for B.Ed. students through online interaction in terms of discussion, chats, image, video, sharing of files. It is easy for the teacher to interact with each and every student through whats app which also may not be possible in large sized classroom within limited space and time. However it is questionable that whether whats app mediated instruction would promote achievement of learner effectively or not.

## Significance and Rationale of the Study:

Whats App is popular instant messaging applicable for various devices and gadgets. It was invented by Jan Koum and Brian Acton in 2009, starts booming since 2010 and used by more than 350 millions users in 2013 (Cohavi, 2013). The users may increase in the last three years up to 2016.

This free of charge application is favoured by the market because of the flexibility and useful features to text, to call, and to send video, audio, links, location, document, pictures. WhatsApp helps the students to learn language better and enhances their English proficiency; the use of WhatsApp should be encouraged to improve the collaboration between high and low achievers students (Mistar, 2016). The flexibility of WhatsApp is potential to bridge the diverse of learning needs through circular writing (Fatah, 2015) and collaborative writing. The students work together in a group to produce a piece of writing. (Harmer, 2007: 270). Kukulska-Hulme & Shield (2008) defines MALL as "formal and informal learning mediated via handheld devices which are potentially available for use of anytime, anywhere" Language learners who used their device such as phones, tablets, electronic dictionaries, MP3 Players, and gaming devices to study autonomously improve their language skills (Kukulska-Hulme & Shield, 2008). Review on Mobile Assisted Language Learning (MALL) presents that mobile learning has both advantages and challenges. Mobile learning facilitates social interaction, data exchanging and collaboration with other learners (Chinnery, 2006). Sa'aleek (2014) summarizes that mobile technology effectively enhance

the language skills due to the features such as accessibility, interactivity, immediacy, and permanency. However, MALL also has challenges such as reduced screen sized, limited audiovisual quality, virtual keyboarding and one finger data entry, and limited power (Chinnery, 2006). High schools students are adolescent learners which have typical characteristics. Harmer (2007: 15) briefly explains that adolescent learners start to talk about more abstract ideas and accept the need for learning of a more intellectual type; they have potential for creative thought and passionate to things which interest them. In many senior high schools, their English language proficiency belongs to intermediate level because they have learnt English since they were in the elementary schools.

Harmer (2007:18) states that in this level the students experience "plateau effect" which means that they don't improve much or faster. These Challenge the teachers to find ways to attract and encourage the students (Lesiak, 2015). Wilson and Horch (2002: 59) suggest that giving adolescents freedom to choose and make lessons they interest will engage them to learn as they need to show their independence. The use of mobile technology for teaching adolescence is an excellent idea because they are the dominant users of mobile technology. Hyland (2009:62) writes that the development of technology demands writer teachers to look for the best ways to support the students word processing,

Bouhnik, & Deshen (2014) asserted that role of whatsapp in the socio-economic life of ordinary people cannot be over emphasized. Whatsapp create an enabling platform for engagement and networking through two way communication, thus between senders and receivers. These could be between individuals as well as between groups at a relatively very low cost. Averagely it cost \$1 to enjoy the service for a year. As a result addicted social media users are shifting gear towards whatsapp. These notwithstanding, whatsapp continues to create the opportunity for individuals and groups to share insights, experience, contents of news, videos, and photos any time all the time every time subject to internet availability and reliability. Moreover, whatsapp enables politicians and political party supporters to disseminate messages without struggle. Typically, it is mentioned of President Barak Obama that his 2008 political message wouldn't have gone far without deploying social media platforms including whats App. In Nigeria, former President Good-Luck Jonathan is equally noted for using same medium for political campaign messages. In Ghana the impact is tremendous. Religious sense, most people use whatsapp to send and receive messages across board. In Ghana, the term whatsapp has become a street credibility with very high usability rate especially among students (Tuurosang and Faisal, 2014). Studies relating to social media and students', socio-economic life, Health, psychology and academic performance have been great. The following authors are particularly notable: (Bouhnik, & Deshen, 2014); Tuurosang and Faisal, 2014; Tawia et al., 2014; Langat, 2015; Sosilu, 2014; Angadi, 2016). The direct link between ICT use and students' study habit and academic performance has been the focus of extensive literature during the last two decades. Some of them help students with their learning by improving the communication between them and the instructors (Valasidou and Bousiou, 2005). Leuven et al. (2004) stated that there is no evidence for a relationship between increased educational use of ICT and students' performance. In fact, they find a consistently negative and marginally significant relationship between ICT use and some student achievement measures. In support to these, some students may use ICT to increase their leisure time and have less time to study. Online gaming and increased communication channels do not necessarily mean increased achievement. On the other hand, Abdulla Y. Al-Hawaj, Wajeeh Elali, and E.H. Twizell (2008), state that ICT has the potential to transform the nature of education: Where and how learning takes place and the roles of students and teachers in the learning process. Karim and Hassan (2006) noted the exponential growth in digital information, which changes the way students perceive study and reading and in how printed materials are used to facilitate study. Based on the extended usage of ICTs in education the need appeared to unravel the myth that surrounds the use of information and communication technology (ICT) as an aid to teaching and learning, and the impact it has on students' study habits.

Presently it is observed that prospective student teachers are frequently using whats app. They are taking active participation in different social websites and interacting with ICT based media for the purpose of learning and preparation of their examination. Such frequent use of social websites and Apps like Facebook, Twitter, Whats App by students at higher education. This arouses following questions:

Can such websites be used as a media for designing instruction based on Interpretation Construction Model for facilitating B.Ed. students of Higher Education in terms of improving their achievement during curriculum transaction by satisfying their learning need and demands in 21<sup>st</sup> century?

#### Statement of Problem:

This study will aim at assessing the influence of ICON model based whatsapp mediated instruction on the achievement of prospective secondary school students (B.Ed. students) in the college of Teacher Education, Angul. The problem is stated as:

*"Effect of ICON Model based Whats App Mediated Instruction on Achievement of B.Ed. students during curriculum transaction in Higher Education"*

#### Operational Definition Used

**Whats App mediated Instruction:** Online Teaching learning process designed with the help of Whats App software having provision of chatting, discussion forum, picture, diagram, image, video, recorded sound, files, internet websites, voice calls etc. in addition to using methods of brain storming, discussion, information gathering, discovery etc.

**ICON Model:** Interpretation Construction Model

**Achievement:** Performance of B.Ed. students in Unit test

**B.Ed. students:** It refers to students pursuing second year Bachelor of Education in the college of teacher education.

**Control Group:** The group of students taught and learned through lecture method in classroom situation with the help of traditional media like blackboard.

**Experimental Group:** The group of students taught and learned through online media using Whats App. Using ICON model of constructivism.

#### OBJECTIVES OF THE STUDY:

The objectives of the study are:

1. To develop ICON Model based Whats app mediated Course design for a unit from second year B.Ed. syllabus.
2. To ascertain the achievement level of B.Ed. students.
3. To compare the achievement of B.Ed students under control group with that of experimental group

#### HYPOTHESIS:

The hypothesis of the study was "There exists no significant difference on achievement of B.Ed. students under control group and experimental group".

#### Delimitation of the Study:

The study is limited to 80 B.Ed. second year students belonging to section "A" of session 2018-19 studying in Nabakrushna Choudhury College of Teacher Education, Angul, Odisha, India.

#### METHODOLOGY:

**Method:** Post Test only Experimental Method of research is followed in the study.

**Control:** Matching subjects or match pairing of the subjects done on the basis of merit list of B.Ed. admission score on study habit followed by random assignment of subjects to control and experimental group is done to conduct the study.

**Population:** All B.Ed. students constituted the population of the study.

**Sample:** The experiment is conducted on 80 B.Ed. students. Stratified random sampling procedure is followed to conduct the research study. Out of 80 B.Ed. students 40 students are placed under control group and 40 students are placed under experimental group. In both control and experimental group again 20 male and 20 female students are there.

#### Tools:

For the collection of data following tools are used

- Self developed ICON based Whats App mediated unit plan, Lesson plans on PE-7B: Gender, School and Society, Unit -2: "Forma of Gender Inequalities and Issues" (According to B.Ed. syllabus, Odisha state)
- Achievement test developed by researcher having 50 marks.

#### Data Analysis and Interpretation:

The objective of the study was to find out the effect of ICON model based whatsapp mediated teaching on the achievement of B.Ed. students. To find out the effect of ICON mode and whatsapp mediated instruction on achievement of B.Ed. students experimental research methodology is conducted by taking control and experimental groups. Hypothesis for the first objective was "There exists no significant difference on achievement of B.Ed. students under control group and experimental group". To test the above hypothesis a comparison of mean scores of control and experimental group was done through 't' test. The result is analyzed in the following table.

Post test scores in Social Science	N	mean	sd	df	't' value	Sig/not sig
Experimental Group	40	30.7	5.42	38	11.64	Significant
Control Group	40	19.2	3.12			

Table value at 0.05 level = 2.024  
At 0.01 level = 2.712

In both the cases calculated value is greater than the table value which indicates that there is significant differences between both the group. Hence null hypothesis is rejected as there is significant difference between control group which is taught by traditional lecture method and experimental group taught by ICON based whatsapp app mediated instruction. And from the mean scores, we can conclude that teaching in 5 E model is more effective.

Hence Null hypothesis is rejected and alternative hypothesis is accepted i.e. “significant difference exists between test results of experimental group and control group of B.Ed. students”

#### FINDINGS OF THE STUDY:

It is found from the study that ICON based Whats app mediated instruction is an effective method for teaching in higher education as it improves the achievement level of B.Ed. students.

#### CONCLUSION:

Instructional media of teaching learning process plays an crucial role in curriculum transaction at higher education..However it is found from the study that the level of achievement in prospective secondary school teachers is not satisfactory with traditional media like blackboard in classroom. On the contrary it is found from the present study that, achievement level is more in experimental group of B.Ed. students who taught through ICON model based Whats app mediated instruction.. Therefore it is a serious challenge for the whole education system to take some effective steps to integrate whatsapp mediated instruction compulsory in teacher education system, by providing appropriate pre service and in-service training programs to university and college teachers with respect to integrate Whats app mediated instruction that could strengthen the quality of education at higher education level..

As it is found that ICON based Whats app mediated instruction is more effective in terms of students achievement it is suggested that in higher education system Whats App can be utilized as an effective media for using ICON model of constructivism.

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